

ENF Environmental Notification Form

For Office Use Only
Executive Office of Environmental Affairs
 EOE No.: *14176*
 MEPA Analyst: *Holly Johnson*
 Phone: 617-626-*1023*

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Water Treatment Facilities (South WTF and North WTF)		
Street: Off Rte 134 (South WTF) and Off Old Bass River Road (North WTF)		
Municipality: Dennis	Watershed: Cape Cod	
Universal Transverse Mercator Coordinates: See Page 3	Latitude: See Page 3	Longitude: See Page 3
Estimated commencement date: July 2008	Estimated completion date: Sept. 2009	
Approximate cost: \$11,110,000	Status of project design: 100%complete	
Proponent: Dennis Water District		
Street: 80 Old Bass River Road		
Municipality: South Dennis	State: MA	Zip Code: 02660
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Kristen Berger, P.E.		
Firm/Agency: Earth Tech, Inc.	Street: 300 Baker Ave, Suite 290	
Municipality: Concord	State: MA	Zip Code: 01742
Phone: 978-371-4099	Fax: 978-371-2468	E-mail: kristen.berger@earthtech.com

- Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?
 Yes No
- Has this project been filed with MEPA before?
 Yes (EOEA No. _____) No
- Has any project on this site been filed with MEPA before?
 Yes (EOEA No. _____) No
- Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:
- a Single EIR? (see 301 CMR 11.06(8)) Yes No
 - a Special Review Procedure? (see 301CMR 11.09) Yes No
 - a Waiver of mandatory EIR? (see 301 CMR 11.11) Yes No
 - a Phase I Waiver? (see 301 CMR 11.11) Yes No

Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres):

Department of Environmental Protection, Bureau of Resource Protection is providing 2% loan through the State Revolving Fund Loan Program for Drinking Water Projects.

Are you requesting coordinated review with any other federal, state, regional, or local agency?
 Yes (Specify _____) No

List Local or Federal Permits and Approvals:

DEP BRP WS 24 Approval to Construct a Water Treatment Facility > 1 mgd
DEP BRP WS 32 Distribution System Modifications

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- | | | |
|--|---------------------------------------|--|
| <input type="checkbox"/> Land | <input type="checkbox"/> Rare Species | <input type="checkbox"/> Wetlands, Waterways, & Tidelands |
| <input checked="" type="checkbox"/> Water | <input type="checkbox"/> Wastewater | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Air | <input type="checkbox"/> Solid & Hazardous Waste |
| <input type="checkbox"/> ACEC | <input type="checkbox"/> Regulations | <input type="checkbox"/> Historical & Archaeological Resources |

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
LAND				<input type="checkbox"/> Order of Conditions <input type="checkbox"/> Superseding Order of Conditions <input type="checkbox"/> Chapter 91 License <input type="checkbox"/> 401 Water Quality Certification <input type="checkbox"/> MHD or MDC Access Permit <input type="checkbox"/> Water Management Act Permit <input type="checkbox"/> New Source Approval <input type="checkbox"/> DEP or MWRA Sewer Connection/ Extension Permit <input checked="" type="checkbox"/> Other Permits <i>(including Legislative Approvals) – Specify:</i> DEP BRP WS 24 Approval to Construct Water Treatment Facility > 1 mgd (treatment facilities) DEP BRP WS 32 Distribution System Modifications (transmission mains)
Total site acreage	See next page			
New acres of land altered		See next page		
Acres of impervious area	See next page	See next page	See next page	
Square feet of new bordering vegetated wetlands alteration		0		
Square feet of new other wetland alteration		0		
Acres of new non-water dependent use of tidelands or waterways		0		
STRUCTURES				
Gross square footage	0	5,000 sf per site	5,000 sf per site	
Number of housing units	0	0	0	
Maximum height (in feet)	0	20	20	
TRANSPORTATION				
Vehicle trips per day	0	1 per site	1 per site	
Parking spaces	0	2 per site	2 per site	
WATER/WASTEWATER				
Gallons/day (GPD) of water use	8,000,000	0	8,000,000	
GPD water withdrawal	8,000,000	0	8,000,000	
GPD wastewater generation/ treatment	0	0	0	
Length of water/sewer mains (in miles)	226 miles system wide	3.4 miles raw water and finished water transmission main for new water treatment facilities	229.4 miles system wide	

South Side WTF:

Lat: 41° 43' 05"
Lon: 70° 09' 07"

Universal Tranverse Mercator Coordinates:(Zone 19, Meters)
N: 4619100
E: 404167

North Side WTF:

Lat: 41° 43' 00"
Lon: 70° 10' 05"

Universal Tranverse Mercator Coordinates:(Zone 19, Meters)
N: 4618967
E: 402824

Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage			
North Side WTF	58.7 acres		
South Side WTF	68.6 acres		
New acres of land altered			
North Side WTF		3.12 acres	
South Side WTF		2.25 acres	
Acres of impervious area			
North Side WTF	0.39 acres	0.56 acres	0.95 acres
South Side WTF	0.23 acres	0.41 acres	0.64 acres

CONSERVATION LAND: Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

Yes (Specify _____) No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

Yes (Specify _____) No

RARE SPECIES: Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

Yes (Specify _____) No

HISTORICAL /ARCHAEOLOGICAL RESOURCES: Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

Yes (Specify _____) No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

Yes (Specify _____) No

AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the project in or adjacent to an Area of Critical Environmental Concern?

Yes (Specify _____) No

PROJECT DESCRIPTION: The project description should include (a) a description of the project site, (b) a description of both on-site and off-site alternatives and the impacts associated with each alternative, and (c) potential on-site and off-site mitigation measures for each alternative (You may attach one additional page, if necessary.)

(a) The existing project sites are entirely within Dennis Water District owned land. The two sites are mostly undeveloped, only containing small pumping station facilities. The North Side WTF site has three brick exterior water supply pumping stations (each approximately 320 square feet) and two brick exterior corrosion control facilities (each approximately 600 square feet), with associated access roads. The South Side WTF site has three brick exterior water supply pumping stations (each approximately 320 square feet) and three brick exterior corrosion control facilities (each approximately 600 square feet), with associated access roads.

This project consists of the construction of two 4 mgd iron (Fe) and manganese (Mn) removal water treatment facilities (WTFs). One WTF will be on the North Side site and one WTF will be on the South Side site. Each WTF will treat water from 5 groundwater supply wells from each of the District's two water system zones. One WTF will be dedicated to water from wells within the North Side zone and the other WTF will be dedicated to treat water from wells within the South Side zone. The project includes the installation of approximately 18,000 linear feet of raw water and finished water transmission mains, to connect the WTFs to the existing wells and to the distribution system. The WTFs will be located on District owned land and be set back from any nearby roadway and/or abutters so that they are not visible from the roadway or abutting properties. Each WTF will be 50 feet by 100 feet metal building with slab-on-grade foundations. Each WTF will have two lined lagoons for settling of treatment residuals (backwash water) and one infiltration lagoon for the supernatant from the lined lagoons.

(b) The proposed WTFs plan provides the least amount of impact on the environment, surroundings and to abutters while maximizing water system hydraulics, safety and redundancy. Construction of individual WTFs at each of 10 wells to receive treatment would be more expensive and cause more environmental impacts since each well would require a dedicated building and lagoons. Construction of one WTF would limit flexibility and redundancy of the water system, require significant modifications to water system hydraulics, and increase electrical costs.

Additionally, building and lagoon footprints would double from those proposed for two WTF sites.

(c) The footprints of the WTFs were kept as small as possible to minimize environmental impacts. The design of the WTFs utilizes the existing corrosion control facilities for the pre-filter chemical addition which provides the benefits of a smaller footprint at the WTF sites (i.e. less environmental impact) and a cost savings to the District. The WTFs will be operated as “unmanned” facilities and will not have a restroom nor an office control center, as the primary control interface for these treatment facilities will be through the existing SCADA controls located at the District’s existing main office. The WTF will utilize a “pump-thru” design, meaning water will be pumped from the existing well pumps through the WTF to the distribution system. This eliminates the need for the design of pumps and below grade basins, thereby minimizing the building footprint..